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I, JULIE BILLINGSLEY, TEAM LEADER EXAMINATION SUPPORT AND SALES hereby certify that annexed is a true copy of the Provisional specification in connection with Application No. 2003902262 for a patent by MATTHEW LEDGAR as filed on 12 May 2003.

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WITNESS my hand this  
Nineteenth day of May 2004

JULIE BILLINGSLEY  
TEAM LEADER EXAMINATION  
SUPPORT AND SALES



## PERCUSSION INSTRUMENT

The present invention relates to a percussion instrument. In particular the present invention relates to a percussion instrument that maybe operable to produce compound sounds without requiring the musician to employ an additional hand to operate a secondary percussive instrument or to suspend operation of a primary percussive instrument so as to operate the secondary percussive instrument.

10 Musicians utilise percussion instruments to establish beat. In many styles of music musicians use a number of types of percussion instruments to establish complex structures to the beat. In order to employ a number of types of percussion instruments it is generally necessary to utilise a number of musicians or arrange the music in a manner in which the operation of multiple percussion instruments are staggered. A limited number of percussion instruments allow more than one type sound to be produced. These types of percussion instruments require the use of complex actions to generate multiple types of percussive sounds. Either the musician must use an additional hand or must interrupt the playing of the first instrument in order to produce a second percussive sound.

The use of a number of musicians to play percussion instruments is generally impractical. Bands of musicians that perform are limited in size for economic and logistic factors. In order for a band of musicians to be economically viable it is necessary for their numbers to be limited. Further, the coordination of a large number of musicians is logistically complex and, from a musical timing point of view, difficult to control. Accordingly, it is desirable to maximise the usage of the musicians by enabling the musicians to produce a greater number of sounds.

30 There have previously been produced a variety of compound instruments that are unable to the production of a plurality of sounds types. For example, musicians often utilise a guitar not only as a stringed instrument

but also as a percussion instrument by striking of the hollow body of the guitar. This type of use of a guitar takes advantage of the hollow body of the guitar rather than use a second type of instrument. In a drum kit a multiplicity of percussion instruments are provided. There may be a variety of different drum types as well as cymbals that maybe struck by the drummer. Whilst the drummer may play one or more drums, in order to play the cymbals the drummer either has to strike the cymbals with a drumstick in the inactive hand or interrupt playing the drums.

We have now found a compound percussion instrument that enables a musician to operate simultaneously two percussive instruments without having to utilise an additional hand. According to the present invention there is provided a compound percussion instrument comprising a first percussive instrument and a second percussive instrument wherein the first percussive instrument is operable by a player using at least one hand and wherein the second percussive instrument is simultaneously operable by a player using said at least one hand wherein said second percussive instrument comprises a hammer, at least one anvil and a trigger wherein the trigger is disposed on the handle of the first percussive instrument and operates the hammer and causes the hammer to strike the anvil.

The compound percussion instrument of the present invention advantageously may be played such that both the first and second percussive instruments may be played independently or in concert whereby notes may be played on the first and second percussive instruments simultaneously. The compound percussion instrument allows a musician to add an additional instrument to a musical composition without having to introduce additional musicians, but more importantly to augment an instrument with a readily operable secondary instrument so as to create a new sound or sounds.

The first percussive instrument may be any desired percussive instrument. For example, the first percussive instrument may be a tambourine, shaker, rattle, bells or the like.

In a preferred embodiment of the present invention the first percussive instrument is a tambourine. The tambourine preferably includes a rim on which a plurality of jingles, metal disks or bells, are mounted. Typically a tambourine will have two rows of jingles disposed around the rim. It is preferred that the tambourine of the first embodiment of the present invention includes three rows of jingles disposed around the rim. Tambourines typically include a portion of the rim that is free of jingles that provides a handle for the musician. Preferably the handle may be shaped to conform to the hand of the musician. Tambourines are typically operated by a rhythmical shaking action of the wrist. The rhythmical shaking action of the wrist is a continuous action that maybe interrupted by striking the tambourine against the musician's body. This type of action generally precludes the musician operating a second instrument with the same hand simultaneously.

Other percussive instruments may be used as the first percussive instrument. It will be apparent to those skilled in the art that percussive instruments that are operable with a single hand may advantageously incorporate a second percussive instrument of the type described herein. Such percussive instruments are generally operated by the musicians simultaneously with other instruments, such as keyboards or a microphone.

The second percussive instrument comprises a hammer, at least one anvil and a trigger wherein the trigger operates the hammer and causes the hammer to strike the anvil. The hammer maybe formed in any convenient configuration. The hammer is mounted to strike the anvil. The hammer may be pivotally mounted on the compound percussion instrument such that the hammer may pivot to strike the anvil. In another configuration, the hammer may be slidably mounted on the compound percussion instrument or in another manner that permits the hammer to strike the anvil.

In a preferred configuration the hammer may be biased to a

primed condition. The hammer may be biased using a spring, of the coiled or leaf type, or using an over centre pivotal mount. It is preferred that the hammer be biased to a primed condition with an over centre pivotal mount having opposed anvils on either side of the pivot point. The hammer is preferably biased using a coil springs such that in a primed condition of the hammer rests against one of the anvils.

In one form of the invention the hammer maybe chosen to provide the desired acoustic response. It is preferred that the hammer be in the form of a temple block. A temple block is a hollow member having at least one opening. Sound produced by striking the temple block against the anvil resonates within the temple block and is emitted therefrom.

Either the at least one anvil or the hammer, or both, may provide the desired acoustic response. Generally it is preferred that either the at least one anvil or the hammer provide the desired acoustic response. For example, where the hammer is chosen to provide the desired acoustic response the at least one anvil may be a rigid member that has little or no acoustic response. Alternatively, where the hammer is a relatively rigid member having little or no acoustic response the at least one anvil is preferably adapted to provide the desired acoustic response.

In a one configuration the hammer is in the form of a temple block that strikes opposed anvils on either side of a pivotal mount. The opposed anvils may be in the form of projections extending from the frame of the compound percussion instrument.

The hammer is actuated by a trigger that causes the hammer to strike the anvil. The trigger is preferably associated with the handle of the compound percussion instrument such that the musician may operate the trigger whilst holding the compound percussion instrument in a manner suited for the playing of the first percussive instrument. The trigger may be directly connected to the hammer and form an extension therefrom. It is preferred

that the trigger is indirectly connected to the hammer via a linkage. The linkage may be a chain or cord.

In a preferred form, the temple block is a slit drum having a tear dropped shape cross section. Preferably the slit will run from an aperture in each end wall of the slit drum along the midline of the slit drum. The temple block or slit drum may be fixedly mounted at its sharp end to the frame of the instrument or it may be hingedly mounted at its sharp end to the frame of the instrument in a preferred configuration.

The present invention will now be described with reference to the accompanying drawings. It will be understood that the accompanying drawings and associated description provided for illustrative purposes.

Figure 1 shows a perspective view of a compound percussion instrument according to one embodiment of the present invention.

Figure 2 shows a perspective view of a compound percussion instrument according to a second embodiment of the present invention.

A tambourine 1 is shown in figure 1. The tambourine 1 is formed from a frame 2. The frame 2 includes a rim 3 and a brace 4. A handle 5 is mounted on the rim 3.

The rim 3 supports the plurality of jingles 6 mounted in the three rows and was placed around the rim 3. A musician is able to play the tambourine 1 by holding the handle 5 and shaking the tambourine 1 causing the jingles 6 to jangle.

The brace 4 extends diametrically within the rim 3. The temple block 7 is mounted on the brace 4. A pivotal mount 8 extends through the brace 4 and an extension 9 of the temple block 7 is attached to the compression spring 10. The compression spring 10 is fixed to the brace 4.

The compression spring 10 holds the temple block 7 against the first anvil 11.

A cord 12 is attached to the temple block 7 above the pivotal mount 8. The cord 12 is also attached to the brace 4. A trigger 13 is pivotally connected to the handle 5 and the cord passes through the remote end of the trigger 13.

- 5 The musician may call the trigger 13 to rotate the temple block 7 such that it strikes the second anvil 14. By releasing the trigger 13 the compression spring 10 returns of the temple block 7 such that it strikes of the first anvil 11.

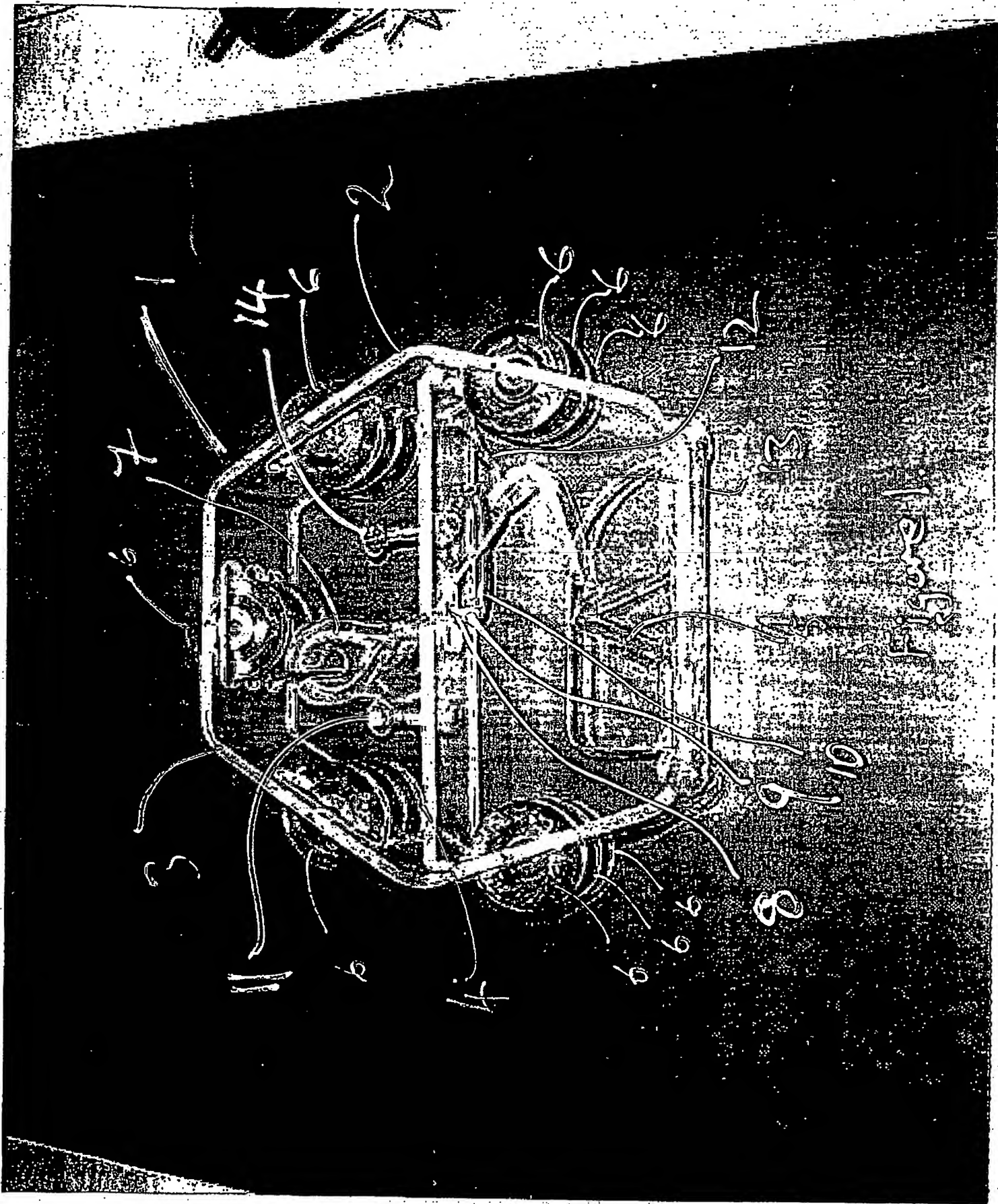
- 10 Figure 2 shows a tambourine 20 having a frame 22 mounted on a handle 21. The frame 22 has five sets of jingles 23 disposed around the frame 22. The jingles are mounted to jangle by the musician shaking the frame.

- 15 A temple block 27 is fixedly mounted to the frame 22 above the handle 21. A pair of opposed hammers 28 are mounted on respective arms 24. The respective arms 24 are interconnected by a cord 30. The respective arms 24 are biased with a spring 31. A lever 26 is pivotally mounted on the frame 22 by a pivot mount 25 in the form of a bolt. The trigger 26 is connected to the arm 24a such that on depression of the trigger 26 arm 24a  
20 pivots away from the temple block 27 and arm 24b moves towards the temple block 27 and causes the hammer 28 mounted on arm 24b to strike the temple block.

- 25 It will be appreciated by those skilled in the art that variations and modifications to the invention described herein will be apparent without departing from the spirit and scope of thereof. Persons skilled in the art will appreciate that the invention described above may be subject to improvements and modifications that will be apparent without departing from the spirit and scope of the invention described herein.

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DATED this 12<sup>th</sup> day of May 2003  
Matthew Ledger  
By His Patent Attorneys  
CULLEN & CO.





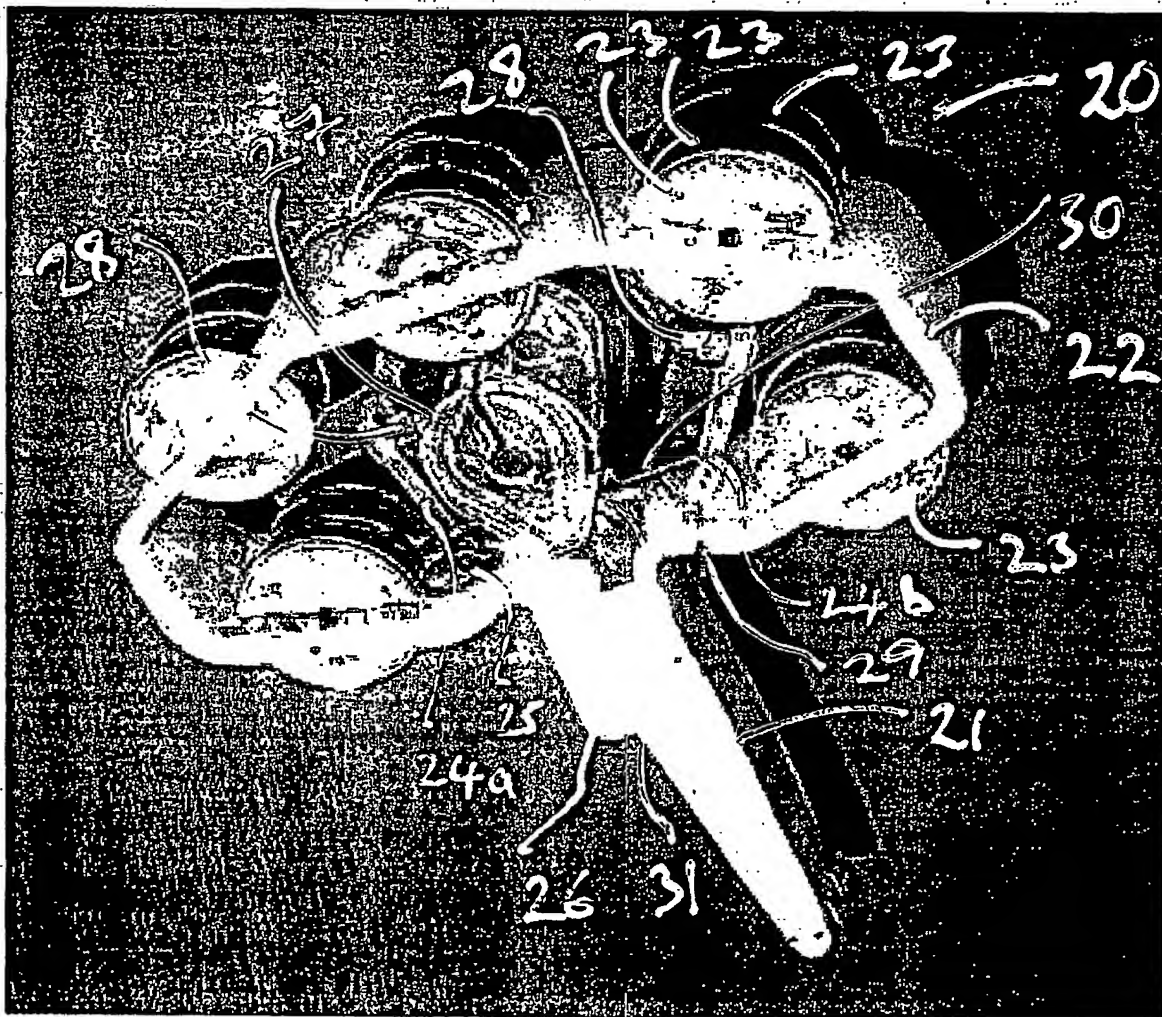


Figure 2.

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